

CLAIMS

1. A pipe coupling for connecting together the ends of two pipes,
comprising a tubular casing (12), having circumferentially extending end
5 flanges (17) projecting inwardly from the axial ends of the casing (12), a
tubular sealing sleeve (13) inside the casing (12), tensioning means (25)
for tightening the casing (12) around the sealing sleeve (13), and frusto-
conical gripping rings (50) located within the casing (12) at opposite ends
of the casing (12), the inner edges (54) of the gripping rings (50) being
10 formed with teeth (52), the casing (12) comprising a strip of metal formed
into a tube with a gap (14) extending longitudinally of the casing (12)
between the free ends of the strip, the tensioning means (25)
interconnecting the free ends of the strip, the arrangement being such that
when the coupling is placed around the ends of two pipes to be connected
15 and the tensioning means (25) are tightened the casing (12) presses the
sealing sleeve (13) against the pipe ends to form seals, and forcing the
teeth on the gripping ring to bite into the surface of the pipes to grip the
pipes characterised in that the free ends of the strip are bent outwardly to
form radially projecting flanges (15) extending longitudinally of the casing
20 (12) on opposite sides of the gap (14), the two radially projecting flanges
(15) being placed between two reinforcing members (20) which extend
substantially the length of the coupling, the tensioning means (25) passing
through sets of aligned holes (30, 31, 32, 33) in the reinforcing members
(20) and the radially projecting flanges (15), the reinforcing members each
25 having an angled cross-section, a web portion through which the holes
(30) for the tensioning means (25) pass, and a flange (21) running along
the longitudinal edge of the web portion that is nearer to the axis of the
coupling, the flange (21) of the reinforcing member bearing against the
tubular portion of the casing (12).

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2. A pipe coupling according to claim 1 in which each reinforcing member (20) has a channel-shaped cross section with flanges (21) running along both longitudinal edges of the web portion.
- 5 3. A pipe coupling according to claim 1 or 2 in which there are two sets of aligned holes (30, 31, 32, 33) and the tensioning means comprise two screw bolts (25) and nuts (34).
- 10 4. A pipe coupling according to claim 2 in which there are two sets of aligned holes (30, 31, 32, 33), the tensioning means comprise two screw bolts (25) and nuts (34) and the heads of the screw bolts (25) and the nuts (34) bear against the web portion when the tensioning means are tightened.
- 15 5. A pipe coupling according to claim 3 or 4 in which the nuts (34) are of a size that fits between the sides (21) of the reinforcing member (20) so as to prevent rotation of the nuts (34).
- 20 6. A pipe coupling according to any of claims 3 to 5 which is arranged such that as the bolts (25) are tightened, the radially projecting flanges (15) can be drawn together thereby applying a radially compressive force to the casing (12).
- 25 7. A pipe coupling according to any of the preceding claims in which the aligned holes (30, 31, 32, 33) are elongated in the radial direction.
- 30 8. A pipe coupling according to any of the preceding claims in which a backing ring (55) is provided inside the casing (12) adjacent each gripping ring (50) between the gripping ring (50) and the sealing sleeve (13) to prevent the sealing sleeve (13) bulging between the teeth of the gripping ring (50).

9. A pipe coupling according to any of the preceding claims in which an inner sleeve (45) is provided inside the sealing sleeve (13) to prevent the sealing sleeve (13) bulging inwardly between the pipe ends.
10. A pipe coupling according to any of the preceding claims in which the
5 outer ends of the radially projecting flanges (15) are bent back to form stiffening flanges (16) along the longitudinal outer edges of the radially projecting flanges (15).
11. A pipe coupling according to claim 10 in which the radially projecting
10 flanges (15) are bent back at right angles.